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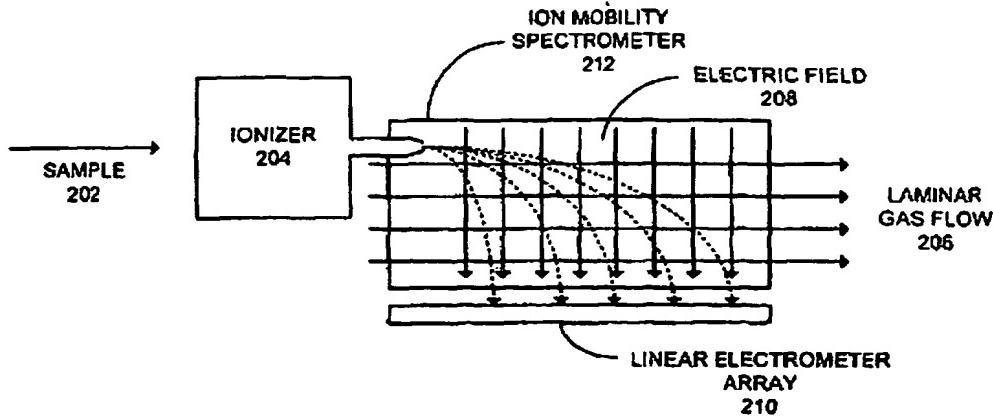
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(54) Title: METHOD AND APPARATUS FOR PERFORMING ION MOBILITY SPECTROMETRY



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(57) Abstract: New method and apparatus for performing ion or particle mobility spectrometry are disclosed. The method comprises ionizing a sample in an ionizer 204, injecting the ionized sample into a laminar gas flow 206 and applying an electric field 208 across the laminar gas flow. The combination of the laminar gas flow and the electric fields results in spatial separation of analyte ions based on ion mobility. The separated ions contact different elements of an electrometer array 210, with the output of the array being analysed to determine the mobility of the analyte ions.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/36183

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 21/71, 24/00, 27/00
US CL : 436/153, 173; 422/98

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 436/153, 173; 422/98

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/022049 A2 (HALEY et al.) 29 MArch 2001 (29.03.2001), the whole text	1-5, 7-8, 10-15, 17-11-5, 7-8, 20-25, 27-28, 30
X	YONG et al. (US 3,902,064) 26 August 1975 (19.08.1995), Abstract, col. 2, lines 58-69	1-5, 7-8, 10-15, 17-11-5, 7-8, 20-25, 27-28, 30
Y		9, 19, 29
X	GUEVREMONT et al. Atmospheric Pressure Ion Trapping in a Tandem FAIMS-FAIMS Coupled to a TOFMS: Studies with Electrospray Generated Gramicidin S Ions", J. Am. Soc. Mass Spectrom., 12, 1320-1330 (2001).	1-5, 7-8, 10-15, 17-18, 20-25, 27-28, 30
Y		6, 16, 26

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"P" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

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Continuation of B. FIELDS SEARCHED Item 3:
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